



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/577,932 | 05/25/2000 | Shigeyuki Maruyama | 000663 | 4823 |

38834 7590 11/29/2005

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP
1250 CONNECTICUT AVENUE, NW
SUITE 700
WASHINGTON, DC 20036

EXAMINER

CHU, CHRIS C

ART UNIT PAPER NUMBER

2815

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/577,932

Applicant(s)

MARUYAMA ET AL.

Examiner

Chris C. Chu

Art Unit

2815

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 3 and 13 - 19 is/are pending in the application.
- 4a) Of the above claim(s) 19 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 - 3 and 14 - 18 is/are allowed.
- 6) ☒ Claim(s) 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on September 20, 2005 has been received and entered in the case.

Election/Restrictions

2. Newly submitted claim 19 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: claim 19 is drawn to a method of fixing a semiconductor wafer to a vacuum chuck table. Specifically, claim 19 recites the following sentence, "placing the wafer on the vacuum chuck table, after introducing the suctioning force to at least the first suction groove, sequentially introducing a suctioning force to at least a suction groove adjacent the first suction groove and then to suction grooves toward the periphery of the vacuum chuck table." This limitation requires a search in specific subclasses of Class 438, whereas, the invention originally elected claims does not have such limitation.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 19 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Since this application contains claim 19 drawn to an invention originally nonelected claim (see above paragraph for detail), a complete reply to the final rejection must include cancellation of nonelected claim or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

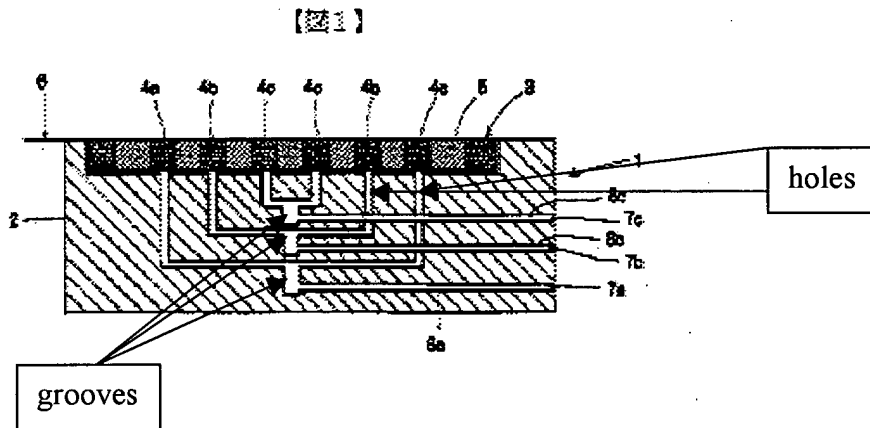
Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by Shuzo (JP 06-143,073).



Shuzo discloses in e.g., Fig. 1 an apparatus for fixing a semiconductor wafer by suction, comprising:

- a vacuum chuck table (1; section 0012, line 2) having a porous plate (3; section 0012, line 1) overlaying a plurality of concentric suction grooves (grooves in the element 1; see previous page of this Office action);
- a plurality of suction passages (8a – 8c; see Fig. 1) each being correspondingly connected to the plurality of concentric suction grooves (see Fig. 1); and

Art Unit: 2815

- each of the plurality of suction passages being connected to more than one hole (holes in the element 1; see previous page of this Office action) on the porous plate (see Fig. 1);
- suctioning device for sequentially introducing a suctioning force into the suction passages at different timing (since each 8a – 8c are connected to the source of a vacuum by separate inlets 7a – 7c, the suction passages 8a – 8c disclosed is conceivably able to allow the suction force into the suction passages at different timing even if it is not optimized for this purpose).

Allowable Subject Matter

5. Claims 1 – 3 and 14 – 18 are allowed.

Response to Arguments

6. Applicant's arguments filed on September 20, 2005 have been fully considered but they are not persuasive.

On page 9, applicant argues that Shuzo does not disclose the suction device for sequentially introducing a sectioning force at different time. This argument is not persuasive. Shuzo clearly shows in Fig. 1 that each suction passages 8a – 8c are connected to the source of a vacuum by separate inlets 7a – 7c at different distance. Thus, when the source of a vacuum suctions air in the suction passages 8a – 8c, the suctioning force in each of the suction passages 8a – 8c sequentially reaches the wafer at different time. Therefore, Shuzo does disclose the suction device for sequentially introducing a sectioning force at different time.

For the above reason, the rejection is maintained.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chris C. Chu whose telephone number is 571-272-1724. The examiner can normally be reached on 11:30 - 8:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on 571-272-1664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

Art Unit: 2815

Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chris C. Chu
Examiner
Art Unit 2815

c.c.
Monday, November 21, 2005



JPE Kenneth Parker
TC2800